

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

CALLAWAY GOLF COMPANY

Plaintiff,

V.

ACUSHNET COMPANY,

Defendant.

C.A. No. 06-91 (SLR)

## JURY TRIAL DEMANDED

**PUBLIC VERSION**

**ACUSHNET'S REPLY BRIEF IN SUPPORT OF  
ITS MOTION FOR SUMMARY JUDGMENT OF INVALIDITY  
OF U.S. PATENT NOS. 6,210,293; 6,506,130; 6,503,156; AND 6,595,873**

Richard L. Horwitz (#2246)  
David E. Moore (#3983)  
POTTER ANDERSON & CORROON LLP  
Hercules Plaza 6th Floor  
1313 N. Market Street  
Wilmington, DE 19899  
Tel: (302) 984-6000  
[rhhorwitz@potteranderson.com](mailto:rhhorwitz@potteranderson.com)  
[dmoore@potteranderson.com](mailto:dmoore@potteranderson.com)

OF COUNSEL:

Joseph P. Lavelle  
Kenneth W. Donnelly  
Brian A. Rosenthal  
HOWREY LLP  
1299 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
Tel: (202) 783-0800

*Attorneys for Defendant Acushnet Company*

Dated: August 27, 2007  
Public Version Dated: September 4, 2007  
816547/30030

TABLE OF CONTENTS

I. INTRODUCTION .....1

II. FACTUAL BACKGROUND .....2

III. ARGUMENT .....3

    A. Callaway Does Not Dispute that the Prior Art Explicitly Teaches the Use  
        of a Polyurethane Cover on a Three-Piece Solid Golf Ball .....3

    B. Under the Correct Claim Construction, Callaway Identifies no Distinctions  
        Between the Patents-in-Suit and the Prior Art.....5

    C. Dr. MacKnight’s Testing is Relevant, Admissible Evidence of What  
        Would have Been Readily Apparent to a Person of Ordinary Skill in the  
        Art .....8

    D. The Asserted Claims are Invalid in Light of the Prior Art .....9

        1. Proudfit in View of the Polyurethane References Renders the  
            Asserted Claims Obvious.....9

        2. Proudfit Anticipates Claims 1-2 of the ‘130 Patent .....14

        3. Nesbitt, in View of the Polyurethane References, Renders Obvious  
            the Asserted Claims .....14

        4. Nesbitt Anticipates the Asserted Claims.....16

    E. There is No Nexus Between the Commercial Success of the Pro V1 and  
        the Asserted Claims .....16

        1. Every technology Callaway identifies as the reason for the Pro  
            V1’s success was available in the prior art .....17

        2. Many other factors that led to the success of the Pro V1.....20

IV. CONCLUSION.....20

## TABLE OF AUTHORITIES

### CASES

<i>Asyst Technologies, Inc. v. Empak, Inc.</i> , No. C 98-20451, 2007 U.S. Dist. LEXIS 59100 (N.D. Cal. Aug. 3, 2007).....	5
<i>In re Burckel</i> , 592 F.2d 1175 (C.C.P.A. 1979) .....	8
<i>Dippin' Dots, Inc. v. Mosey</i> , 476 F.3d 1337 (Fed. Cir. 2007).....	18
<i>Friskit, Inc. v. RealNetworks, Inc.</i> , No. C 03-05085, 2007 U.S. Dist. LEXIS 54192 (N.D. Cal. July 26, 2007).....	5
<i>J.P. Sedlak Assocs. v. Connecticut Life &amp; Casualty Ins. Co.</i> , No. 3:98CV145, 2000 U.S. Dist. LEXIS 18947 (D. Conn. Mar. 31, 2000).....	9
<i>J.T. Eaton &amp; Co., Inc. v. Atlantic Paste &amp; Glue Co.</i> , 106 F.3d 1563 (Fed. Cir. 1997).....	17
<i>KSR International Co. v. Teleflex Inc.</i> , 127 S. Ct. 1727 (2007).....	4, 5, 8
<i>In re Klopfenstein</i> , 380 F.3d 1345 (Fed. Cir. 2004).....	6
<i>Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.</i> , 485 F.3d 1157 (Fed. Cir. 2007).....	5
<i>McNeil-PPC, Inc. v. Perigo Co.</i> , No. 05 Civ. 1321, 2007 U.S. Dist. LEXIS 50255 (S.D.N.Y. July 3, 2007) .....	17
<i>MercExchange, L.L.C. v. eBay, Inc.</i> , No. 2:01cv736, 2007 U.S. Dist. LEXIS 54642 (E.D. Va. July 27, 2007) .....	5
<i>In re Merck &amp; Co.</i> , 800 F.2d 1091 (Fed. Cir. 1986).....	17
<i>MicroStrategy Inc. v. Business Objects Americas, Inc.</i> , 410 F. Supp. 2d 348 (D. Del. 2006).....	7
<i>Ormco Corp. v. Align Technology, Inc.</i> , 463 F.3d 1299 (Fed. Cir. 2006).....	16, 17

<i>Pfizer, Inc. v. Apotex, Inc.</i> , 480 F.3d 1348 (Fed. Cir. 2007).....	7, 12
<i>Richdel, Inc. v. Sunspool Corp.</i> , 714 F.2d 1573 (Fed. Cir. 1983).....	17
<i>Syntex LLC v. Apotex, Inc.</i> , 407 F.3d 1371 (Fed. Cir. 2005), <i>aff'd</i> , 221 Fed. Appx. 1002 (Fed. Cir. 2007) .....	8

## I. INTRODUCTION

The undisputed, material facts establish that the patents-in-suit are obvious as a matter of law. In particular, it is undisputed that: (1) three-piece solid construction golf balls (and the benefits of such constructions) were well known since the early 1980s; (2) the use of polyurethane covers (and the benefits of such materials) was well known since the 1970s; and (3) the prior art references themselves explicitly teach using a polyurethane cover on a three-piece solid construction golf ball. The level of artisan skill is also undisputed. These undisputed facts establish that the invention of the patents-in-suit is an obvious combination of old elements with no unexpected results. Indeed the combination itself was explicitly taught by the prior art.

Thus, the only distinction Callaway asserts between its patents and the prior art is that the prior art does not explicitly disclose “on the ball” Shore D hardnesses of the outer cover layers of the balls. This argument is premised on an improper construction of “Shore D hardness,” contradicted by the patents-in-suit’s own definition of “Shore D hardness.” Under a proper construction, Callaway does not identify any distinction between the prior art and the asserted claims.

Even under Callaway’s flawed claim construction, Dr. MacKnight has offered un rebutted testing that shows that it would have been readily apparent to one of ordinary skill that prior art golf balls had an “on the ball” Shore D hardness within the claimed ranges of the patents-in-suit. Callaway’s argument that such testing does not prove inherency is misplaced – Dr. MacKnight’s testing shows what would have been apparent to one of ordinary skill in the art, which is the question relevant to obviousness.

Finally, Callaway points to the commercial success of, and praise for, Acushnet’s Pro V1 golf balls, asserting that the success of *Acushnet’s* products somehow shows the patents are valid. Callaway’s reliance on secondary considerations is misplaced, as Callaway has failed to establish a nexus between the Pro V1’s success and the patent claims. Among various deficiencies in Callaway’s proof, Callaway shows only that the Pro V1 had features and benefits

already taught in the prior art. Callaway has no evidence whatsoever that the commercial success of the Pro V1 was due to any novel features of the claimed invention. Moreover, where the prima facie case of obviousness is so clear, as here, secondary consideration evidence, no matter how strong, cannot be used to save the patents.

## II. FACTUAL BACKGROUND

Callaway implies that Sullivan's patents-in-suit invented polyurethane in a three-piece construction in the early 1990s, and that the golf industry subsequently used his teachings to introduce such golf balls. [D.I. 244, at 4-5]. However, the patents in fact played no role in the development of three-piece polyurethane balls, as Callaway well knows and should have told the Court. The original Sullivan 1993 parent application of all the patents-in-suit ("the '510 application") was directed primarily to three piece balls with an ionomer outer cover layer, as in the Nesbitt patent of 1984, over a high-acid ionomer inner cover layer. *Id.* at 4-5. During the second half of the 1990s, Spalding filed dozens of applications claiming priority to the '510 application, but did not pursue claims directed to polyurethane covers based on the Sullivan disclosure. *See* '510 Family Continuity Data from PAIR (Ex. 56).

The first patent-in-suit that claimed polyurethane covers was the '293 patent, filed not until the end of 1999, and which did not issue until April of 2001. By this time, almost all of the major golf ball companies had introduced polyurethane-covered three-piece solid core balls. Bridgestone introduced the Precept Tour Premium in 1999, Nike the Tour Accuracy in 1999, Callaway the Rule 35 in 2000, and Acushnet the Pro V1 in 2000. [D.I. 217, Exs. 48 and 49]. Ironically, the only major golf ball company that had not introduced such a ball by 2001 was Spalding, the '293 patent's owner. Moreover, the other three of four patents-in-suit were not filed until 2001, well after the widespread introduction of polyurethane-covered three-piece balls. Thus, the golf ball market adopted three-piece, polyurethane golf balls technology before any of the patents-in-suit issued, and before three of the four patents-in-suit were ever filed.

Callaway contends that the prior art relied upon by Acushnet (the same art the PTO has recently used to reject all claims of the patents-in-suit in the reexaminations) was actually before the examiner during the original prosecution of the patents-in-suit. [D.I. 244, at 1-2]. But Callaway knows, and has admitted, that this is really not true. The inherent properties of the materials disclosed in the prior art, such as the Shore D hardness and flexural modulus of various ionomers and urethanes, were *not* before the PTO. [D.I. 238, at 3-4] [REDACTED]

[REDACTED]

Indeed, the absence of this information in the original prosecution of the patents-in-suit was one of the reasons for the Patent Office ordering reexamination of the patents. The Patent Office has now rejected every single claim of the patents based on this additional information. [D.I. 10, Ex. A at 8; D.I. 185, Ex. A]. Callaway's lack of candor about such facts speaks volumes as to the bankruptcy of its position on the merits.

### III. ARGUMENT

#### A. Callaway Does Not Dispute that the Prior Art Explicitly Teaches the Use of a Polyurethane Cover on a Three-Piece Solid Golf Ball

Callaway is unable to dispute the key inescapable fact: the prior art expressly teaches the use of polyurethane covers on a three-piece construction golf ball claimed in its patents.

[REDACTED]

[REDACTED] Not only does the prior art expressly teach use of a polyurethane cover on a three-piece, solid construction ball, but the prior art also expressly teaches one of ordinary skill in the art what benefits could be achieved by making such a ball (namely, distance, feel, and durability).

In particular, Nesbitt teaches that the use of a soft outer cover over a hard inner cover layer produces increased distance without sacrificing feel and spin (*i.e.*, “long and soft”). Nesbitt states that such a construction provides “an increased coefficient of restitution” (*i.e.*, better distance), while “the ‘feel’ or playing characteristics are attained similar to those derived from a balata covered golf ball.” Nesbitt, col. 1:36-44. Mr. Sullivan himself attributed the “long and soft” benefit to the Nesbitt ball: “The soft outer cover develops maximum spin and workability of a balata-covered wound ball off irons and around the green and the hard resilient inner cover provides the increase in COR and reduced spin off the driver, resulting in maximum distance.” [D.I. 217, Ex. 7 at AC0100932]. Nesbitt’s benefits, as taught by Nesbitt in 1984, are what Callaway calls “unexpected results” and tries to attribute to the patents-in-suit.

Moreover, Wu teaches the benefits of polyurethane as a cover material over ionomers or balata: “Golf balls made in accordance with the present invention have been found to have improved shear resistance and cut resistance compared to golf balls having covers made from either balata or SURLYN®.” Wu, col. 2:28-32. Thus, polyurethane’s good durability as a cover material was known in the prior art, and there was nothing unexpected on that account.

Hence, the benefits of using a soft outer cover on three-piece double-cover ball (long distance, but good spin on approach or iron shots) were notoriously well known since the 1980s, and the benefits of using polyurethane as a cover material were also well known. Thus, there were no unexpected results in combining the use of a polyurethane cover with a three piece ball, following the express teaching of Molitor ‘751, for example. As in *KSR*, this is a case where the claims do no more than combine known elements to produce predictable results. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007). It is not surprising, therefore, that Callaway ignores the *KSR* ruling and the recent cases applying it to grant summary judgment of



obviousness, even in the face of secondary considerations. *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007); *Friskit, Inc. v. RealNetworks, Inc.*, No. C 03-05085, 2007 U.S. Dist. LEXIS 54192 (N.D. Cal. July 26, 2007). As in those cases, which Callaway does not attempt to distinguish, summary judgment is appropriate here.<sup>1</sup>

**B. Under the Correct Claim Construction, Callaway Identifies no Distinctions Between the Patents-in-Suit and the Prior Art**

Virtually all of Callaway's alleged distinctions between the patents-in-suit and the prior art are based on its improper claim construction. Callaway argues that the prior art does not expressly teach an "on the ball" Shore D hardness of the outer cover of less than 64, and that the claims therefore should cover only an "on the ball" measurement of the Shore D hardness. As Acushnet has briefed elsewhere [D.I. 207] this construction is wrong as it ignores the patents, which define Shore D hardness as "measured in accordance with ASTM method D-2240," a measurement made "off the ball." '293 patent, col. 7:19-21. Under this proper construction, Callaway cannot distinguish the prior art from the patents-in-suit.<sup>2</sup>

Callaway argues that, under the correct "off the ball" construction, a fact dispute exists as to whether manufacturer data sheets can be relied on as a source for "off the ball" hardness of a

---

<sup>1</sup> The wave of cases applying *KSR* to invalidate patents has continued. A court recently granted judgment of obviousness in light of *KSR*, despite a contrary jury verdict and the fact that the court had previously denied a summary judgment motion under pre-*KSR* law. *Asyst Techs., Inc. v. Empak, Inc.*, No. C 98-20451, 2007 U.S. Dist. LEXIS 59100, at \*28 (N.D. Cal. Aug. 3, 2007). In another recent case, the court recognized that *KSR* makes it much more difficult to defend the validity of patents the PTO in reexamination has previously declared to be invalid: "The timing of *KSR* is relevant in that it was issued *subsequent* to PTO actions finding that the combination of the elements constituting the [patent in suit] were invalid as obvious. Tellingly, if prior art rendered the [patent in suit] obvious under the pre-*KSR* standard of obviousness, it appears more likely to be deemed obvious under the post-*KSR* standard...." *MercExchange, L.L.C. v. eBay, Inc.*, No. 2:01cv736, 2007 U.S. Dist. LEXIS 54642, at \*\*27-28 n.10 (E.D. Va. July 27, 2007). Similarly, as for Callaway's patents-in-suit, the Patent Office has found that the asserted claims were obvious under pre-*KSR* law. Under *KSR*, there is no question that the claims are obvious.

<sup>2</sup> Callaway was also unable to point to any such distinctions in its response to the PTO. See [D.I. 217, Ex. 28]. Thus, if, as is likely, the PTO continues to find that the broadest reasonable construction of "Shore D hardness" embraces measurements under the ASTM standard, the PTO will likely make a final rejection of all of these claims in the reexamination.

material. [D.I. 244 at 16-17]. This argument is not well taken, for it is contradicted by the patents-in-suit [REDACTED]

[REDACTED] Callaway's own Court filings also contradict its present position. See Ex. 60, *Bridgestone Sports Co. v. Callaway Golf Co.*, Civ. A. No. 1 00-CV-1871-JEC, Callaway Motion for Partial Summary Judgment, at 10-11.

Specifically, Callaway relied on DuPont data sheets to argue that "[t]he Nesbitt patent inherently discloses an intermediate layer having a Shore-D hardness of 67," and "[t]he Nesbitt patent expressly discloses an intermediate layer made of Surlyn 1605, which has a known specific gravity of 0.95." *Id.* Callaway's about-face exposes the lack of credibility of its present argument.

[REDACTED]

A party opposing summary judgment must do more than offer metaphysical doubt regarding the material facts in order to defeat a properly supported summary judgment motion. While Acushnet bears the burden of persuasion on invalidity, Callaway bears the burden of providing some evidence that would lead a jury to disagree with Acushnet's evidence. *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1360 (Fed. Cir. 2007) (“[O]nce a challenger has presented a prima facie case of invalidity, the patentee has the burden of going forward with rebuttal evidence.”); *MicroStrategy Inc. v. Bus. Objects Ams., Inc.*, 410 F. Supp. 2d 348, 362-66 (D. Del. 2006) (granting summary judgment of invalidity on the basis that plaintiff “fail[ed] to provide any contrary evidence”).

Indeed, the inference Callaway seeks regarding the unreliability of manufacturers' data sheets is directly contradicted by the patents-in-suit themselves. The specification relies on such data sheets to report the “off the ball” Shore D hardness of six different Surlyn® ionomers (Table 1), ten different Iotek ionomers (Tables 2-4), an Estane polyurethane (‘293 patent, col. 13:7-20), and two different Escor® Iotek ionomers (‘293 patent, col. 20:60-21:15). *See, e.g.*, ‘293 patent, col. 20:58-59 (preceding the data sheet information with the sentence, “The physical properties of these high acid acrylic acid based ionomers are as follows:”). Thus, there is no question that the patents-in-suit rely on commercial data sheets for the inherent “off the ball” hardness measurements of materials. This also demonstrates conclusively and consistent with the rest of the record that one of ordinary skill in the art would similarly rely on such data sheets for the inherent properties of materials used in forming the cover of a golf ball. [REDACTED]

[REDACTED]

**C. Dr. MacKnight's Testing is Relevant, Admissible Evidence of What Would have Been Readily Apparent to a Person of Ordinary Skill in the Art**

Under its improper “on the ball only” claim construction, Callaway asks the Court to disregard testing performed by Dr. MacKnight, calling the results irrelevant and inadmissible. To the contrary, Dr. MacKnight’s testing is probative and relevant, and the test data is admissible. These tests show what a person of ordinary skill in the art would have readily understood from the teachings of the prior art.<sup>4</sup>

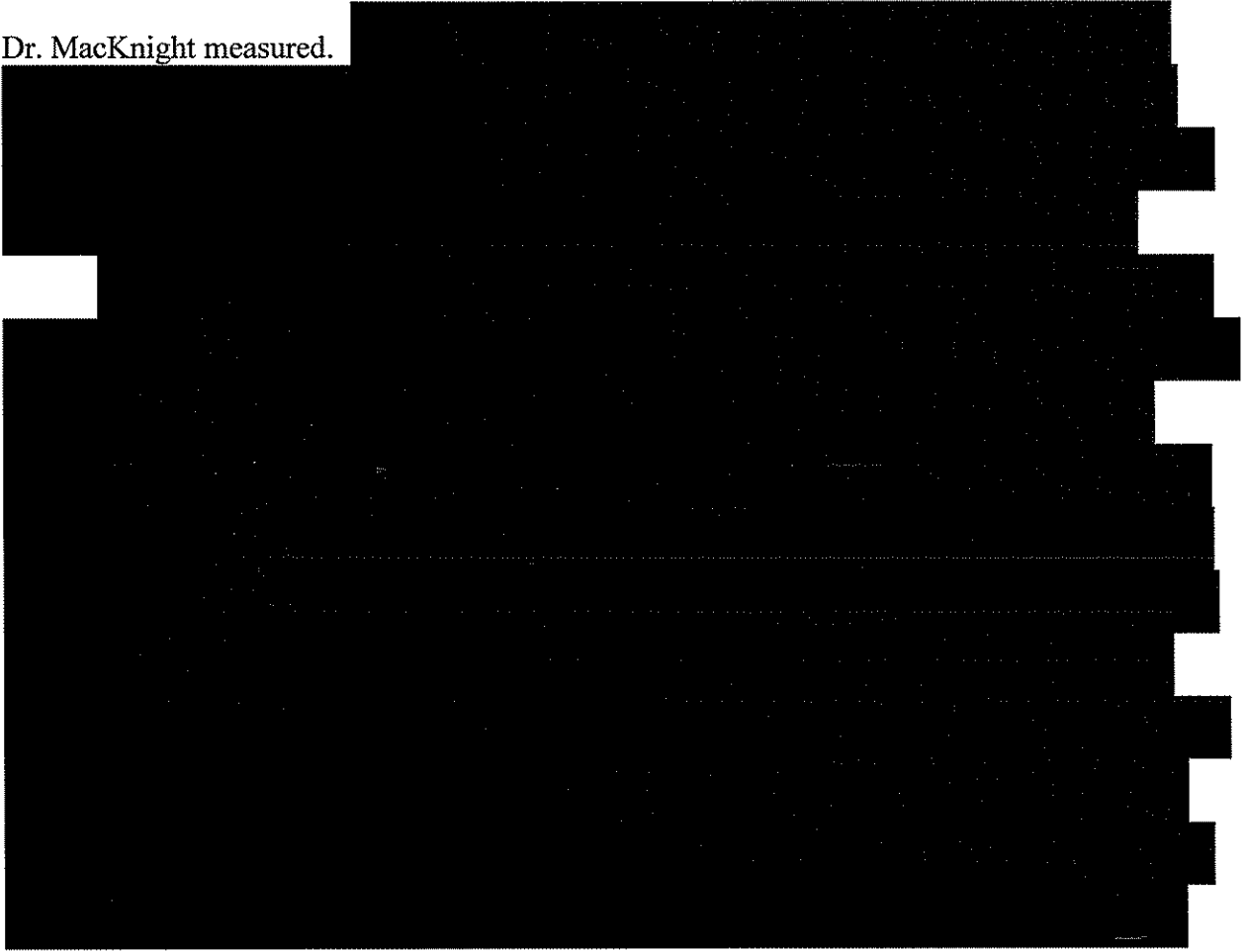
Callaway argues that Dr. MacKnight’s testing does not show that the prior art inherently discloses balls with an “on the ball” Shore D hardness of less than 64. That argument is misplaced. To prove obviousness, Acushnet does not need to show that the Shore D hardness would be inherent from the prior art disclosure. Inherency is an anticipation concept. For an obviousness inquiry, prior art references can suggest much more than just what is expressly or inherently disclosed therein. *See, e.g., Syntex LLC v. Apotex, Inc.*, 407 F.3d 1371, 1380 (Fed. Cir. 2005), *aff’d*, 221 Fed. Appx. 1002 (Fed. Cir. 2007) (“What a reference teaches a person of ordinary skill is not, as Syntex’s expert appears to believe, limited to what a reference specifically ‘talks about’ or what is specifically ‘mentioned’ or ‘written’ in the reference.”); *In re Burckel*, 592 F.2d 1175, 1179 (C.C.P.A. 1979) (“Under 35 U.S.C. § 103, a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests.”). Instead, the relevant question for obviousness is what the teachings of the prior art suggest to a person of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1742 (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”).

Dr. MacKnight’s testing shows what would have been easily ascertainable to a person of ordinary skill in the art upon following the teaching of the prior art references. Specifically, an artisan would be taught by the prior art to apply a polyurethane cover to a three-piece solid construction golf ball, as set forth above. Thus, an artisan could exercise his ordinary skill to

---

<sup>4</sup> Of course, if the Court adopts Acushnet’s claim construction, Callaway’s complaints about Dr. MacKnight’s testing are moot.

combine the prior art references, as they suggest, to make the balls that Dr. MacKnight made, and would have found that the “on the ball” Shore D hardness of those balls is well under 64, as Dr. MacKnight measured.



**D. The Asserted Claims are Invalid in Light of the Prior Art**

**1. Proudfit in View of the Polyurethane References  
Renders the Asserted Claims Obvious**

Proudfit in combination with the polyurethane prior art renders obvious the patents-in-suit. The evidence shows clearly and convincingly that Proudfit alone satisfies every element of the asserted claims, with the exception of the use of a polyurethane outer cover. The

---

<sup>5</sup> It is appropriate to submit additional evidence in reply briefs to cure alleged evidentiary defects. *See, e.g., J.P. Sedlak Assocs. v. Conn. Life & Cas. Ins. Co.*, No. 3:98CV145, 2000 U.S. Dist. LEXIS 18947, at \*\*9-10 (D. Conn. Mar. 31, 2000) (holding that an affidavit submitted with a reply brief cured any evidentiary defects in the opening motion).

polyurethane outer cover, in turn, is taught by *many* references, and express teachings to combine the two are found in the art.

Callaway attempts unconvincingly to manufacture distinctions between Proudfit and the prior art. First, it incorrectly implies that a person of skill would lack knowledge of the inherent properties of the materials disclosed in Proudfit. [D.I. 244, at 21]. Yet the material properties of Surlyn® ionomers were public and published in commercial data sheets, and well known in the art in 1995. [D.I. 217, Ex. 37]. Indeed, the Shore D hardness measurements reported in the patents-in-suit include those from DuPont data sheets. *See, e.g.*, ‘293 patent, Table 1.

Second, Callaway suggests that the DuPont data sheets do not accurately report the Shore D hardness of the Surlyn® ionomers disclosed in Proudfit. [D.I. 244, at 21]. As set forth above, this inference, insofar as creating a material issue of fact, is unreasonable. The evidence shows that those skilled in the art, including Callaway, routinely relied on such data sheets, and that the patents-in-suit themselves routinely refer to data sheet properties of materials. *See, e.g.*, ‘293 patent, Table 1. The commercial data sheets show that both of the ionomers blended in the inner cover layer of Proudfit (8940 and 9910) have Shore D hardnesses over 60. [D.I. 217, Ex. 37].

Third, Callaway incorrectly argues that Proudfit does not disclose an outer cover layer with a Shore D hardness of less than 64. [D.I. 244, at 21]. As Acushnet explained in its Opposition to Callaway’s Motion for Summary Judgment of No Anticipation, Proudfit does in fact disclose an outer cover layer of 64 or less, whether measured “on” or “off” the ball. [D.I. 238, at 16-20]. The outer cover layer disclosed by Proudfit is the same as that of the Wilson Ultra Tour Balata. Mr. Proudfit himself attests to this undisputed fact. [D.I. 238, Ex. 5].<sup>6</sup> Acushnet’s contemporaneous testing of that ball also showed that the outer cover layer had an “on the ball” Shore D hardness of 52, which is under 64. [D.I. 217, Ex. 11, at AC0072945].<sup>7</sup>

---

<sup>6</sup> Mr. Proudfit’s declaration is corroborated by a declaration provided to the Patent Office in 1993 during prosecution of his patent, in which he stated that the outer cover layer of the subject Wilson ball was the same as that disclosed in his patent. [D.I. 217, Ex. 47, at CW0302947].

<sup>7</sup> Callaway incorrectly states that there is no evidence of the plaque Shore D hardness of the Proudfit materials. [D.I. 238, at 27]. The plaque hardness, however, would be less than the

Acushnet has also shown that Proudfit, when combined with Molitor '751, Molitor '637 or Wu renders obvious the use of a polyurethane outer cover layer on a ball with a Shore D hardness of less than 64. [D.I. 217, at 17-23]. Callaway offers no contrary evidence.

**a. Proudfit + Molitor '751**

Callaway does not dispute that Molitor '751 expressly teaches using its cover material on balls with the constructions used in Nesbitt and Proudfit. Molitor '751, col. 3:7-12. Instead, it argues that Molitor '751 does not disclose an "on the ball" Shore D hardness of less than 64. [D.I. 244, at 22-26]. Callaway argues that a Shore C hardness of 72-76 (which Molitor '751 discloses) has not been shown to correlate to a Shore D hardness of less than 64. But there is no evidence to support Callaway's speculation and no genuine fact dispute exists as to this issue.

Callaway focuses on comparison charts that state that they cannot be used as a "conversion chart." [D.I. 244, at 23-26]. This misses the point. The "**comparison charts**" (as they are named) unquestionably provide a useful comparison or correlation between hardness measurements on the various Shore scales. In particular, these charts consistently show that a material with a Shore C hardness measurement of 72-76 would certainly have a Shore D hardness measurement of less than 64. [See, e.g., D.I. 217, Ex. 55, at CW0309056].

Dr. MacKnight's testing also confirms that fact. Dr. MacKnight tested three different balls with an outer cover layer even harder than that described by Molitor '751, and measured the average "on the ball" hardness as 50.1, 49.6, and 51.2, respectively. [D.I. 217, Ex. 30, MacKnight Decl. ¶ 33]. This is entirely consistent with the correlation tables provided in the literature, and it confirms that the materials disclosed in Molitor '751 as having a Shore C hardness of 72 to 76 would certainly have a Shore D hardness of well under 64.

---

hardness "on the ball." In addition, there is plenty of evidence in the record as to the plaque hardness of those materials. For example, Ms. Wu testified that the plaque hardness of balata is around 42. [D.I. 217, Ex. 33, Wu Tr. at 20:7-12].



In short, every single piece of evidence leads to the conclusion that a material with a Shore C hardness of 72-76 will have a Shore D hardness of less than 64.<sup>8</sup> No reasonable jury could find otherwise on this record. It is not enough for Callaway to offer mere speculation and conjecture in light of Acushnet's strong showing. If Callaway wanted to avoid summary judgment it might have tried to offer evidence showing that the cover layer disclosed in Molitor '751 would have a Shore D hardness of more than 64. *Pfizer*, 480 F.3d at 1360. Callaway has offered no such evidence, however, because there is none.

**b. Proudfit + Wu**

Callaway's sole argument with respect to Proudfit in view of Wu is that a person of ordinary skill in the art would not have known that the cover layer disclosed in Wu would have an "on the ball" Shore D hardness of less than 64.<sup>9</sup> [D.I. 244, at 26-27]. Dr. MacKnight's testing, however, provides clear evidence of what would be readily ascertainable to a person in the art. Callaway ignores this testing in its analysis of the Proudfit/Wu combination. Dr. MacKnight showed that if one exercised ordinary skill and followed the teachings of the prior art patents to make the ball of Proudfit with the outer cover disclosed in Wu, one would find that the "on the ball" Shore D hardness was 56.8, well under 64. [D.I. Ex. 217, Ex. 30, ¶ 33].

When this is done, as reported by Dr. McKnight, one finds that the "on the ball" measurement is within the claims. Again, Callaway offers no contrary evidence. Thus, the Court should find that a person of ordinary skill in the art would be able to readily ascertain that the outer cover of Wu, applied to the ball of Proudfit, would have an "on the ball" Shore D hardness of well under 64.

<sup>8</sup>

<sup>9</sup> Callaway states that there is no evidence of the Shore D hardness of the Wu polyurethane measured "off the ball." But Ms. Wu testified that it was 48. Ex. 64, Wu Tr. at 94:18-95:5.



**c. Proudfit + Molitor ‘637**

Again, Callaway does not dispute that it would be obvious to use the polyurethane cover materials of Molitor ‘637 as the outer cover layer of the Proudfit ball. [D.I. 244, at 27-28]. Instead, Callaway argues that the Molitor ‘637 polyurethane would not necessarily have a Shore D hardness of less than 64. *Id.*

Under the correct construction of “Shore D hardness,” Molitor ‘637 clearly discloses a Shore D hardness of less than 64. Estane 58133 has a Shore D hardness of 55, which is less than 64. [D.I. 217, Ex. 39]. Callaway argues that because the Estane is foamed, it may have a different hardness. But Dr. MacKnight tested the foamed Estane composition disclosed in Molitor ‘637 and found its “off the ball” Shore D hardness at about the same, 56.5. [D.I. 217, Ex. 30, ¶ 33; Ex. 61, Dalton Decl. ¶¶ 8-11; Ex. B]. Thus, it cannot reasonably be disputed that Molitor’s Estane composition would have an “off the ball” hardness of less than 64.

In addition, Dr. MacKnight’s testing is instructive of what a person of ordinary skill in the art would be able to readily ascertain as to the “on the ball” hardness of the Molitor ‘637 polyurethane. A person of ordinary skill in the art would easily be able to make the Proudfit ball, replacing the outer cover with the Molitor ‘637 polyurethane, and find that the Shore D hardness “on the ball” is 59.4, which is less than 64, as Dr. MacKnight did. [D.I. 217, Ex. 30 ¶ 33].

Finally, Callaway argues that the Molitor ‘637 patent teaches that cover layers less than 0.060 inches cannot achieve “functional foaming.” Molitor ‘637, however, teaches only that foaming cannot be achieved at that thickness “when the cover is *injection molded*.” Molitor ‘637, col. 5:3-7 (emphasis added). This passage says nothing about molding thin covers with other well-known methods, like compression molding. The undisputed facts show that foamed golf ball covers could be compression molded at far thinner than 0.060 inches. [REDACTED]

Hence, Molitor ‘637 does not teach away from covers less than 0.060 inches. [REDACTED]

## 2. Proudfit Anticipates Claims 1-2 of the '130 Patent

As set forth in Acushnet's Opposition to Callaway's Motion for Summary Judgment of No Anticipation [D.I. 238, at 16-20], Proudfit anticipates claims 1 and 2 of the '130 patent, which do not require the use of polyurethane in the outer cover layer. Specifically, the outer cover layer material of Proudfit is the same as that used in the Wilson Ultra Tour Balata ball (as confirmed by Mr. Proudfit's declaration and his 1993 declaration to the Patent Office), and that ball had an "on the ball" Shore D hardness of well under 64. [D.I. 238, at 16-20].

## 3. Nesbitt, in View of the Polyurethane References, Renders Obvious the Asserted Claims

Callaway argues that Nesbitt does not incorporate by reference the polyurethane and blended ionomer covers disclosed in Molitor '637. [D.I. 244, at 11-12]. Acushnet has briefed that issue at length. [D.I. 238, at 9-13]. However, it still bears emphasis that whether Nesbitt incorporates Molitor '637 by reference has relatively minor importance to the resolution of this motion. Whether or not there is an incorporation, Nesbitt at a minimum provides explicit direction to an artisan to refer to Molitor '637 for cover layer materials to use on the Nesbitt ball.

Callaway argues that Nesbitt does not disclose an inner cover layer with a Shore D hardness of 60 or more. [D.I. 244, at 31]. DuPont data sheets, which the '293 and the Molitor patents rely on for properties of materials, show that the Shore D hardness of Nesbitt's inner cover layer is greater than 60. [D.I. 217, Ex. 37]. There is also no dispute that the "on the ball" hardness of the inner cover layer would be even greater than the data sheet measurements. [D.I. 217, Ex. 16, Nesbitt Tr. at 243:24-244:17].

Next, Callaway incorrectly argues that Nesbitt does not disclose the use of a blended ionomer in the inner cover layer. [D.I. 244, at 31]. Nesbitt incorporates by reference the blended ionomer composition of Molitor '637. [See D.I. 202 at 2-3]. But even if Nesbitt is not deemed to have incorporated the blended ionomers of Molitor '637, there can be no genuine dispute that Nesbitt at least directs a person of ordinary skill in the art to the materials disclosed in Molitor '637 for the inner cover layer. Thus, it would be obvious to do so.

Thus, Nesbitt, in view of the polyurethane references, renders the claims obvious.

**a. Nesbitt + Molitor ‘751**

Callaway does not dispute that it would be obvious to a person of ordinary skill in the art to use the polyurethane cover material of Molitor ‘751 as the outer cover layer of the ball disclosed in Nesbitt. Indeed, Molitor ‘751 expressly teaches the use of its polyurethane on the Nesbitt ball. Molitor ‘751, col. 3:7-12. Instead, Callaway’s only argument that the claims are not obvious in light of Nesbitt and Molitor ‘751 is that the Molitor ‘751 patent allegedly does not teach an outer cover layer whose Shore D hardness is less than 64. [D.I. 244, at 29-30]. For the reasons set forth above for the Proudfit and Molitor ‘751 combination, Acushnet has shown that one of ordinary skill in the art would understand Molitor ‘751 to teach such an outer cover layer.

**b. Nesbitt + Wu**

Again, Callaway does not dispute that it would be obvious to a person of ordinary skill in the art to replace the outer cover layer of Nesbitt with the polyurethane disclosed in Wu. Indeed, Wu expressly teaches the benefits of using her polyurethane as a replacement for a Surlyn® golf ball cover, such as that disclosed in Nesbitt. Wu, col. 2:34-46; col. 3:28-32. Instead, Callaway’s only argument that the claims are not obvious in light of Nesbitt and Wu is that Wu allegedly does not teach an outer cover layer whose Shore D hardness is less than 64. For the reasons set forth for the Proudfit and Wu combination, Acushnet has demonstrated that Callaway is wrong.

**c. Nesbitt + Molitor ‘637**

Callaway’s primary argument against the Nesbitt and Molitor ‘637 combination is that Molitor ‘637 allegedly does not disclose a polyurethane cover whose Shore D hardness is less than 64. As demonstrated above for the Proudfit and Molitor ‘637 combination, the Molitor ‘637 patent would clearly teach a person of ordinary skill in the art that the cover layer has a Shore D hardness of less than 64, whether measured “on the ball” or “off the ball.”

Callaway’s only other argument in response to the Nesbitt and Molitor ‘637 patent also fails. Specifically, Callaway argues that Molitor ‘637 patent teaches away from the claimed

thickness of the outer cover layer. [D.I. 244, at 31]. Callaway is wrong. The Molitor ‘637 patent does describe a cover thickness of 0.090 inches, but then explicitly states: “Naturally, it would be possible to utilize larger diameter centers and hence minimize the cover thickness.” Molitor ‘637, col. 4:67-5:1. Thus, contrary to Callaway’s arguments, Molitor ‘637 explicitly suggests using a thinner cover layer, and does not teach away from the claimed cover thickness.

#### **4. Nesbitt Anticipates the Asserted Claims**

Acushnet has briefed at length why Nesbitt incorporates by reference the “foamable compositions” of Molitor ‘637, including the blended ionomer composition and the polyurethane composition. [D.I. 202, at 2-4]. Thus, for the same reasons that Nesbitt and Molitor ‘637 render the asserted claims obvious, Nesbitt also anticipates the asserted claims.

#### **E. There is No Nexus Between the Commercial Success of the Pro V1 and the Asserted Claims**

Callaway fails to demonstrate that there is a connection, or “nexus,” between the commercial success of the Pro V1 and the asserted claims of the patents-in-suit. Acushnet does not dispute that the Pro V1 has been an enormous success, and has received wide praise. However, the success of the Pro V1 cannot be relied on to support an inference of validity unless there is a basis to believe that its success is due to practicing the patents-in-suit as opposed to what was already available in the prior art. *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311-12 (Fed. Cir. 2006). Here, the evidence of such a “nexus” is lacking. The properties of the Pro V1 that Callaway points to as causing its success (long distance, good spin, durability), were all well known in the prior art before the patents-in-suit. Callaway points to no evidence that connects the Pro V1’s success to the patents-in-suit.

Initially, the Court will note that any claimed “nexus” would be implausible in any event. Polyurethane-covered, three-piece golf balls were adopted by the market before any of the patents-in-suit ever issued, and before three of the four patents-in-suit were even filed. Every major golf ball company except Spalding had introduced a polyurethane-covered three-piece golf

ball by 2000.<sup>10</sup> Thus, that the three-piece polyurethane-covered ball was developed by every major company without the benefit of the patents-in-suit strongly suggests that such a construction was obvious. *In re Merck & Co.*, 800 F.2d 1091, 1098 (Fed. Cir. 1986) (evidence of contemporaneous invention is probative of the level of knowledge of one of ordinary skill). At a minimum, the contemporaneous independent development of similar balls by others, before these patents issued, certainly suggests that the patents are not the cause of the commercial success these balls enjoyed.

In addition, it is undisputed that over 50 patents apply to the Pro V1 golf balls, including many that were filed in the 1980s and early 1990s, covering a wide range of technologies. [D.I. 217, Ex. 17, ¶ 49; D.I. 216, at 36 n. 19]. Obviously, when there are multiple patents covering a product, as there are here, one cannot blindly assume that the product's commercial success can be attributed to any one of the patents. *See McNeil-PPC, Inc. v. Perigo Co.*, No. 05 Civ. 1321, 2007 U.S. Dist. LEXIS 50255, at \*34 (S.D.N.Y. July 3, 2007) (finding no nexus between commercial success and patent, where the patented product was covered by three patents).

**1. Every technology Callaway identifies as the reason for the Pro V1's success was available in the prior art**

The Federal Circuit has repeatedly held that a party asserting commercial success must demonstrate that this success is due to the inventive contribution of the claimed invention, rather than that which was available in the prior art. *See Ormco Corp.*, 463 F.3d at 1312 (“if the feature that creates the commercial success was known in the prior art, the success is not pertinent”); *J.T. Eaton & Co., Inc. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997) (holding plaintiff has the burden to prove that success is “due to the merits of the claimed invention beyond what was readily available in the prior art”); *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1580 (Fed. Cir. 1983) (affirming finding of obviousness because plaintiff did not show that

---

<sup>10</sup> Spalding introduced its first urethane-over-ionomer ball in 2002. Ex. 65, Kennedy Tr. at 65:10-13.

success was due to anything other than that available in the prior art); *Dippin' Dots, Inc. v. Mosey*, 476 F.3d 1337, 1345 (Fed. Cir. 2007).

Here, absolutely everything that Callaway identifies as the cause of Pro V1's commercial success was "readily available in the prior art." Callaway identifies as the reason for the Pro V1's success that it uses a "urethane-over ionomer multi-layer construction." [D.I. 244 at 35]. But the prior art expressly teaches a urethane-over-ionomer multi-layer construction. Molitor '751, for example, expressly suggests using its polyurethane as the outer cover in "balls having a separate solid layer beneath the cover as disclosed, for example, in U.S. Pat. No. 4,431,193 to Nesbitt."

The prior art also expressly teaches the benefits that Callaway attributes to its patents. Callaway identifies three problems allegedly solved by the inventions-in-suit, which it argues led to the success of the Pro V1: a) good distance without sacrificing spin and feel; b) good feel without sacrificing distance; and c) the feel of balata without sacrificing durability. [D.I. 244, at 35]. Each of these is explicitly taught by the prior art.

Nesbitt teaches that the use of a hard inner cover layer and a soft outer cover layer provides the dual goals of good distance and good feel without sacrifice to either property. He teaches that the increased distance is attained by using a hard inner cover layer, which provides "increased coefficient of restitution": "Through the use of the first ply or layer of hard, high flexural modulus resinous material on the core or center, a maximum coefficient of restitution may be attained." Nesbitt, col. 1:57-60. Nesbitt further teaches that the good feel comparable to a balata ball is attained by using an outer cover layer of soft material:

The first layer or ply is provided with a second or cover layer of a comparatively soft, low flexural modulus resinous material or of cellular or foam composition molded over the first layer and core or center assembly. Such golf ball has the "feel" and playing characteristics simulating those of a softer balata covered ball.

*Id.* col. 1:51-56. Mr. Sullivan attributed this benefit to Nesbitt. [D.I. 217, Ex. 7 at AC0100932].



In addition, hundreds of patents have expressed as a benefit of their invention that the balls are “long and soft.”<sup>11</sup> Wu also expressly teaches that the benefits of a soft polyurethane rather than ionomer or balata provide the feel and control of balata without sacrificing durability.

It has been proposed to employ polyurethane as a cover stock for golf balls because, like SURLYN®, it has a relatively low price compared to balata and provides superior cut resistance [i.e., durability] over balata. However, unlike SURLYN®-covered golf balls, polyurethane-covered golf balls can be made to have the “clock” and “feel” of balata.

Wu, col. 1:40-46. Accordingly, each of the benefits that Callaway attributes to the claimed invention, and the Pro V1, are expressly taught by the prior art.

Moreover, Callaway’s opposition brief asserts that the only distinction between the asserted claims and the prior art is the alleged lack of disclosure of an outer cover layer with an “on the ball” Shore D hardness of less than 64. But here too, Callaway has not come close to showing that the commercial success of the Pro V1 is due to an “on the ball” Shore D hardness of less than 64.<sup>12</sup> It offers not a shred of evidence that the specific “on the ball” Shore D hardness of the outer cover layer of the Pro V1 has had anything to do with that ball’s success.

Once again, the benefits that Callaway points to (long and soft, good spin, durability) were all known in the prior art, as was the basic combination of urethane on a three-piece ball. There is no showing that the patents (as opposed to the use of techniques known in the prior art) caused the Pro V1’s success, and the success of the Pro V1 is thus not probative of validity. A patent that uses prior art techniques can be expected to have the benefits of the prior art techniques. Callaway has thus failed to defeat Acushnet’s strong showing of obviousness.

---

<sup>11</sup> Over 20 patents issued to Callaway, 55 to Spalding, 150 to Bridgestone, and 60 to Sumitomo claim that their golf balls deliver increased distance without sacrificing feel and control (*i.e.*, “long and soft”). [D.I. 217, Ex. 17, Morgan Decl. ¶ 60].

<sup>12</sup> [REDACTED]

## 2. Many other factors led to the success of the Pro V1

The undisputed facts further show that many market factors led to the Pro V1's success. Those factors include the strength of the Titleist brand, the increased interest in solid construction golf balls occasioned by Tiger Woods' success with the Nike Tour Accuracy, and the increased demand for solid construction golf balls that came with improved equipment and fitter, stronger Tour players. [D.I. 216, at 39-40]. Callaway does not dispute that these market forces played an important role in the commercial success of the Pro V1.

Callaway's only response is that Acushnet emphasizes the performance of the Pro V1 in its advertising, and that the Pro V1 has a thin polyurethane outer cover and an ionomer inner cover. [D.I. 244, at 36]. But as set forth above, this combination was known in the prior art, so there is nothing about Acushnet's advertising that suggests its commercial success is due to the asserted claims, as opposed to the prior art. In addition, Acushnet advertises many other aspects of the ball in addition to the cover, such as the construction of the core, size of the core, dimple size, shape, aerodynamics, and the like. Ex. 70. These features likewise have no connection to the patents-in-suit.

In short, Callaway has not connected the Pro V1's success to any contribution of the patents-in-suit. If the use of a polyurethane-covered three-piece construction has contributed to the success of the Pro V1, that technology was old. There are no material facts in dispute that preclude the Court from entering summary judgment. Obviousness is a question of law, and summary judgment of invalidity should be granted.

## IV. CONCLUSION

Therefore, for all of the foregoing reasons, and those stated in its opening brief, Acushnet requests that its Motion for Summary Judgment of Invalidity of the patents-in-suit be granted.



POTTER ANDERSON & CORROON LLP

OF COUNSEL:

Joseph P. Lavelle  
Kenneth W. Donnelly  
Brian A. Rosenthal  
HOWREY LLP  
1299 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
Tel: (202) 783-0800

Dated: August 27, 2007  
Public Version Dated: September 4, 2007  
816547/30030

By: /s/ David E. Moore  
Richard L. Horwitz (#2246)  
David E. Moore (#3983)  
Hercules Plaza 6th Floor  
1313 N. Market Street  
Wilmington, DE 19899  
Tel: (302) 984-6000  
[rhorwitz@potteranderson.com](mailto:rhorwitz@potteranderson.com)  
[dmoore@potteranderson.com](mailto:dmoore@potteranderson.com)

*Attorneys for Defendant Acushnet Company*

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

**CERTIFICATE OF SERVICE**

I, David E. Moore, hereby certify that on September 4, 2007, the attached document was electronically filed with the Clerk of the Court using CM/ECF which will send notification to the registered attorney(s) of record that the document has been filed and is available for viewing and downloading.

I hereby certify that on September 4, 2007, I have Electronically Mailed the document to the following person(s):

Thomas L. Halkowski  
Fish & Richardson P.C.  
919 N. Market Street, Suite 1100  
P. O. Box 1114  
Wilmington, DE 19899-1114  
[halkowski@fr.com](mailto:halkowski@fr.com)

Frank E. Scherkenbach  
Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804  
[scherkenbach@fr.com](mailto:scherkenbach@fr.com)

Robert A. Denning  
David S. Shuman  
Fish & Richardson P.C.  
12290 El Camino Real  
San Diego, CA 92130  
[denning@fr.com](mailto:denning@fr.com)  
[shuman@fr.com](mailto:shuman@fr.com)

/s/ David E. Moore  
Richard L. Horwitz  
David E. Moore  
Potter Anderson & Corroon LLP  
Hercules Plaza – Sixth Floor  
1313 North Market Street  
Wilmington, DE 19899-0951  
(302) 984-6000  
[rhowitz@potteranderson.com](mailto:rhowitz@potteranderson.com)  
[dmoore@potteranderson.com](mailto:dmoore@potteranderson.com)

# **EXHIBIT 56**

## United States Patent &amp; Trademark Office



United States Patent and Trademark Office

[Home](#) | [Site Index](#) | [Search](#) | [FAQ](#) | [Glossary](#) | [Contacts](#) | [eBusiness](#) | [eBiz Alerts](#) | [News](#) | [Help](#)
[Portal Home](#)
[Patents](#)
[Trademarks](#)
[Other](#)
[Patent eBusiness](#)
[Electronic Filing](#)
[Patent Application Information \(PAIR\)](#)
[Patent Ownerships](#)
[Fees](#)
[Fundamental Resources & Support](#)
[Patent Information](#)
[Patent Guidance and General Info](#)
[Codes, Rules & Manuals](#)
[Employee & Office Directories](#)
[Resources & Public Notices](#)
[Patent Searches](#)
[Patent Official Gazette](#)
[Search Patents & Applications](#)
[Search Biological Sequences](#)
[Codes, Products & Services](#)
[Other](#)
[Copyrights](#)
[Trademarks](#)
[Policy & Law](#)
[Records](#)
[Patent Application Information Retrieval](#)
[Order Certified Application As Filed](#) [Order Certified File Wrapper](#) [View Order List](#)

08/070,510

MULTI-LAYER GOLF BALL

[Select New Case](#) [Application Transaction Data](#) [History](#) [Continuity Data](#) [Address & Attorney/Agent](#)

## Parent Continuity Data

Description	Parent Number	Parent Date	Parent Status	Patent Number
No Parent Continuity Data Found.				

## Child Continuity Data

08/542,793 filed on 10-13-1995 which is Abandoned claims the benefit of 08/070,510  
 08/562,540 filed on 11-20-1995 which is Abandoned claims the benefit of 08/070,510  
 08/631,613 filed on 04-10-1996 which is Patented claims the benefit of 08/070,510  
 08/714,661 filed on 09-16-1996 which is Patented claims the benefit of 08/070,510  
 08/815,556 filed on 03-12-1997 which is Abandoned claims the benefit of 08/070,510  
 08/840,392 filed on 04-29-1997 which is Patented claims the benefit of 08/070,510  
 08/870,585 filed on 06-06-1997 which is Abandoned claims the benefit of 08/070,510  
 08/920,070 filed on 08-26-1997 which is Patented claims the benefit of 08/070,510  
 08/926,194 filed on 09-09-1997 which is Abandoned claims the benefit of 08/070,510  
 08/926,246 filed on 09-05-1997 which is Abandoned claims the benefit of 08/070,510  
 08/926,872 filed on 09-10-1997 which is Abandoned claims the benefit of 08/070,510  
 08/997,857 filed on 12-24-1997 which is Abandoned claims the benefit of 08/070,510  
 08/998,243 filed on 12-24-1997 which is Abandoned claims the benefit of 08/070,510  
 09/040,456 filed on 03-18-1998 which is Patented claims the benefit of 08/070,510  
 09/040,887 filed on 03-18-1998 which is Patented claims the benefit of 08/070,510  
 09/049,410 filed on 03-27-1998 which is Patented claims the benefit of 08/070,510  
 09/049,759 filed on 03-27-1998 which is Patented claims the benefit of 08/070,510  
 09/076,343 filed on 05-12-1998 which is Abandoned claims the benefit of 08/070,510  
 09/121,628 filed on 07-23-1998 which is Abandoned claims the benefit of 08/070,510  
 09/165,812 filed on 10-02-1998 which is Abandoned claims the benefit of 08/070,510  
 09/234,275 filed on 01-19-1999 which is Patented claims the benefit of 08/070,510  
 09/357,733 filed on 07-21-1999 which is Abandoned claims the benefit of 08/070,510  
 09/387,953 filed on 09-01-1999 which is Patented claims the benefit of 08/070,510

## United States Patent &amp; Trademark Office

09/394,829 filed on 09-13-1999 which is Patented claims the benefit of 08/070,510  
09/470,196 filed on 12-21-1999 which is Patented claims the benefit of 08/070,510  
09/490,183 filed on 01-22-2000 which is Patented claims the benefit of 08/070,510  
09/523,561 filed on 03-10-2000 which is Patented claims the benefit of 08/070,510  
09/524,031 filed on 03-13-2000 which is Patented claims the benefit of 08/070,510  
09/550,369 filed on 04-19-2000 which is Patented claims the benefit of 08/070,510  
09/562,773 filed on 05-02-2000 which is Patented claims the benefit of 08/070,510  
09/604,751 filed on 06-27-2000 which is Patented claims the benefit of 08/070,510  
09/610,416 filed on 07-05-2000 which is Patented claims the benefit of 08/070,510  
09/611,576 filed on 07-05-2000 which is Patented claims the benefit of 08/070,510  
09/659,785 filed on 09-11-2000 which is Patented claims the benefit of 08/070,510  
09/688,763 filed on 10-16-2000 which is Abandoned claims the benefit of 08/070,510  
09/707,340 filed on 11-06-2000 which is Abandoned claims the benefit of 08/070,510  
09/723,392 filed on 11-28-2000 which is Patented claims the benefit of 08/070,510  
09/723,487 filed on 11-28-2000 which is Patented claims the benefit of 08/070,510  
09/723,705 filed on 11-28-2000 which is Patented claims the benefit of 08/070,510  
09/724,216 filed on 11-28-2000 which is Patented claims the benefit of 08/070,510  
09/725,610 filed on 11-29-2000 which is Patented claims the benefit of 08/070,510  
09/726,001 filed on 11-29-2000 which is Patented claims the benefit of 08/070,510  
09/726,742 filed on 11-30-2000 which is Patented claims the benefit of 08/070,510  
09/733,218 filed on 12-08-2000 which is Abandoned claims the benefit of 08/070,510  
09/737,001 filed on 12-14-2000 which is Abandoned claims the benefit of 08/070,510  
09/737,067 filed on 12-14-2000 which is Patented claims the benefit of 08/070,510  
09/766,234 filed on 01-19-2001 which is Patented claims the benefit of 08/070,510  
09/776,278 filed on 02-02-2001 which is Patented claims the benefit of 08/070,510  
09/782,140 filed on 02-12-2001 which is Patented claims the benefit of 08/070,510  
09/783,484 filed on 02-14-2001 which is Patented claims the benefit of 08/070,510  
09/800,292 filed on 03-05-2001 which is Abandoned claims the benefit of 08/070,510  
09/832,154 filed on 04-10-2001 which is Patented claims the benefit of 08/070,510  
09/840,475 filed on 04-23-2001 which is Abandoned claims the benefit of 08/070,510  
09/842,607 filed on 04-25-2001 which is Patented claims the benefit of 08/070,510  
09/843,362 filed on 04-25-2001 which is Patented claims the benefit of 08/070,510  
09/873,594 filed on 06-04-2001 which is Abandoned claims the benefit of 08/070,510  
09/873,642 filed on 06-04-2001 which is Patented claims the benefit of 08/070,510  
09/878,798 filed on 06-11-2001 which is Patented claims the benefit of 08/070,510  
09/894,960 filed on 06-29-2001 which is Patented claims the benefit of 08/070,510  
09/932,771 filed on 08-17-2001 which is Abandoned claims the benefit of 08/070,510  
09/933,057 filed on 08-20-2001 which is Patented claims the benefit of 08/070,510  
09/992,798 filed on 11-05-2001 which is Patented claims the benefit of 08/070,510  
09/993,422 filed on 11-05-2001 which is Patented claims the benefit of 08/070,510  
10/047,626 filed on 01-15-2002 which is Abandoned claims the benefit of 08/070,510  
10/074,665 filed on 02-13-2002 which is Patented claims the benefit of 08/070,510  
10/074,849 filed on 02-13-2002 which is Abandoned claims the benefit of 08/070,510  
10/080,266 filed on 02-21-2002 which is Patented claims the benefit of 08/070,510

## United States Patent &amp; Trademark Office

[10/217,553](#) filed on 08-13-2002 which is Patented claims the benefit of [08/070,510](#)  
[10/321,685](#) filed on 12-17-2002 which is Patented claims the benefit of [08/070,510](#)  
[10/413,410](#) filed on 04-14-2003 which is Patented claims the benefit of [08/070,510](#)  
[10/618,412](#) filed on 07-11-2003 which is Patented claims the benefit of [08/070,510](#)  
[10/619,148](#) filed on 07-14-2003 which is Patented claims the benefit of [08/070,510](#)  
[10/712,942](#) filed on 11-13-2003 which is Patented claims the benefit of [08/070,510](#)  
[10/716,683](#) filed on 11-19-2003 which is Patented claims the benefit of [08/070,510](#)  
[10/772,689](#) filed on 02-05-2004 which is Patented claims the benefit of [08/070,510](#)  
[11/093,374](#) filed on 03-29-2005 which is Patented claims the benefit of [08/070,510](#)  
[11/147,803](#) filed on 06-07-2005 which is Patented claims the benefit of [08/070,510](#)  
[11/152,692](#) filed on 06-13-2005 which is Patented claims the benefit of [08/070,510](#)  
[11/621,032](#) filed on 01-08-2007 which is Pending claims the benefit of [08/070,510](#)  
[95/000,120](#) filed on 01-17-2006 which is Pending claims the benefit of [08/070,510](#)  
[95/000,121](#) filed on 01-17-2006 which is Pending claims the benefit of [08/070,510](#)  
[95/000,122](#) filed on 01-17-2006 which is Pending claims the benefit of [08/070,510](#)  
[95/000,123](#) filed on 01-17-2006 which is Pending claims the benefit of [08/070,510](#)

## If you need help:

- Call the Patent Electronic Business Center at (866) 217-9197 (toll free) or e-mail [EBC@uspto.gov](mailto:EBC@uspto.gov) for specific questions about Patent Application Information Retrieval (PAIR).
- Send general questions about USPTO programs to the [USPTO Contact Center \(UCC\)](#).
- If you experience technical difficulties or problems with this application, please report them via e-mail to [Electronic Business Support](#) or call 1 800-786-9199.

You can suggest USPTO webpages or material you would like featured on this section by E-mail to the [webmaster@uspto.gov](mailto:webmaster@uspto.gov). While we cannot promise to accommodate all requests, your suggestions will be considered and may lead to other improvements on the website.

[Home](#) | [Site Index](#) | [Search](#) | [eBusiness](#) | [Help](#) | [Privacy Policy](#)

# **EXHIBIT 57**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**



# **EXHIBIT 58**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 59**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 60**

IN THE UNITED STATES OF DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION

BRIDGESTONE SPORTS CO., LTD.,	)	
<u>Plaintiff,</u>	)	
vs.	)	
CALLAWAY GOLF COMPANY,	)	
CALLAWAY GOLF BALL COMPANY, and	)	CIVIL ACTION NO.
WOODMONT GOLF CLUB, LLC,	)	1 00-CV-1871-JEC
<u>Defendants.</u>	)	Hon. Julie E. Carnes
	)	
CALLAWAY GOLF COMPANY and	)	
CALLAWAY GOLF BALL COMPANY,	)	
<u>Counterclaimants,</u>	)	
	)	
vs.	)	
BRIDGESTONE SPORTS CO., LTD.	)	
<u>Counterdefendant.</u>	)	

CALLAWAY GOLF COMPANY AND CALLAWAY GOLF BALL COMPANY'S  
MOTION FOR PARTIAL SUMMARY JUDGMENT

MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT  
OF CALLAWAY GOLF COMPANY AND CALLAWAY GOLF BALL  
COMPANY'S MOTION FOR PARTIAL SUMMARY JUDGMENT

STATEMENT OF MATERIAL FACTS NOT IN DISPUTE

DECLARATION OF BENJAMIN A. KATZENELLENBOGEN IN SUPPORT OF  
CALLAWAY GOLF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

CERTIFICATE OF SERVICE

Don W. Martens  
Vito A. Canuso III  
John P. Giezantanner  
Benjamin A. Katzenellenbogen  
  
KNOBBE MARTENS OLSON & BEAR,  
LLP  
620 Newport Center Drive  
16<sup>th</sup> Floor  
Newport Beach, CA 92660  
(949) 760-0404

Thomas W. Rhodes  
Georgia Bar No. 602300  
  
SMITH, GAMBRELL & RUSSELL, LLP  
Suite 3100, Promenade II  
1230 Peachtree Street, N.E.  
Atlanta, Georgia 30309-3592  
(404) 815-3500

ORIGINAL  
U.S.D.C. Atlanta

IN THE UNITED STATES OF DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION

JAN 26 2001

LUTHER D. HARRIS, Clerk  
Deputy Clerk

BRIDGESTONE SPORTS CO., LTD.,  
Plaintiff,  
vs.  
CALLAWAY GOLF COMPANY,  
CALLAWAY GOLF BALL COMPANY, and  
WOODMONT GOLF CLUB, LLC,  
Defendants.  
CALLAWAY GOLF COMPANY and  
CALLAWAY GOLF BALL COMPANY,  
Counterclaimants,  
vs.  
BRIDGESTONE SPORTS CO., LTD.  
Counterdefendant.

CIVIL ACTION NO.  
1 00-CV-1871-JEC  
Hon. Julie E. Carnes

CALLAWAY GOLF COMPANY AND CALLAWAY GOLF BALL COMPANY'S  
MOTION FOR PARTIAL SUMMARY JUDGMENT

MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT  
OF CALLAWAY GOLF COMPANY AND CALLAWAY GOLF BALL  
COMPANY'S MOTION FOR PARTIAL SUMMARY JUDGMENT

STATEMENT OF MATERIAL FACTS NOT IN DISPUTE

DECLARATION OF BENJAMIN A. KATZENELLENBOGEN IN SUPPORT OF  
CALLAWAY GOLF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

CERTIFICATE OF SERVICE

Don W. Martens  
Vito A. Canuso III  
John P. Giezantanner  
Benjamin A. Katzenellenbogen

KNOBBE MARTENS OLSON & BEAR,  
LLP  
620 Newport Center Drive  
16<sup>th</sup> Floor  
Newport Beach, CA 92660  
(949) 760-0404

Thomas W. Rhodes  
Georgia Bar No. 602300

SMITH, GAMBRELL & RUSSELL, LLP  
Suite 3100, Promenade II  
1230 Peachtree Street, N.E.  
Atlanta, Georgia 30309-3592  
(404) 815-3500

TABLE OF CONTENTS

1. Callaway Golf Company and Callaway Golf Ball Company's Motion for Partial Summary Judgment .
2. Memorandum of Points and Authorities in Support of Callaway Golf Company and Callaway Golf Ball Company's Motion for Partial Summary Judgment
3. Statement of Material Facts Not in Dispute
4. Declaration of Benjamin A. Katzenellenbogen in Support of Callaway Golf's Motion for Partial Summary Judgment
5. Declaration of Bernard C. Soriano In Support of Callaway Golf's Motion for Partial Summary Judgment (Filed separately due to size)
6. Certificate of Service



IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION

BRIDGESTONE SPORTS CO., LTD.	)	
	)	
<u>Plaintiff,</u>	)	
	)	
v.	)	
	)	
CALLAWAY GOLF COMPANY,	)	
CALLAWAY GOLF BALL COMPANY, and	)	Civil Action No.:
WOODMONT GOLF CLUB, LLC	)	1 00-CV-1871-JEC
	)	
<u>Defendants.</u>	)	Hon. Julie E. Carnes
	)	
CALLAWAY GOLF COMPANY and	)	
CALLAWAY GOLF BALL COMPANY	)	
	)	
<u>Counterclaimants,</u>	)	
	)	
v.	)	
	)	
BRIDGESTONE SPORTS CO., LTD.	)	
	)	
<u>Counterdefendant.</u>	)	

CALLAWAY GOLF COMPANY AND CALLAWAY GOLF BALL COMPANY'S  
MOTION FOR PARTIAL SUMMARY JUDGMENT

By this Motion, Defendants/Counterclaimants Callaway Golf Company and Callaway Golf Ball Company (collectively "Callaway Golf") respectively move for Summary Judgment.

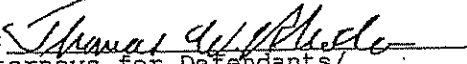
The ground for this Motion is that there are no disputed facts regarding invalidity of the Higuchi Patent, U.S. Patent No. 5,553,852, to Higuchi et al. Therefore, Callaway Golf is entitled to judgment as a matter of law.

Callaway Golf respectfully invites the Court's attention to the Memorandum of Points and Authorities, the Statement of Material Facts Not in Dispute, The Declaration of Bernard C. Soriano and the Declaration of Ben Katzenellenbogen, filed herewith.

Respectfully Submitted,

Don W. Martens  
Vito A. Canuso III  
John P. Giezentanner  
Benjamin A. Katzenellenbogen  
KNOBBE MARTENS OLSON & BEAR, LLP  
620 Newport Center Drive  
16<sup>th</sup> Floor  
Newport Beach, CA 92660  
(949) 760-0404

Thomas W. Rhodes  
(Ga. Bar No. 602300)  
SMITH, GAMBRELL & RUSSELL, LLP  
3100 Promenade II  
1230 Peachtree Street  
Atlanta, GA 30309  
(404) 815-3551

By:   
Attorneys for Defendants/  
Counterclaimants



IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION

BRIDGESTONE SPORTS CO., LTD.	)	
	)	
<u>Plaintiff,</u>	)	
	)	
v.	)	
	)	
CALLAWAY GOLF COMPANY,	)	
CALLAWAY GOLF BALL COMPANY, and	)	Civil Action No.:
WOODMONT GOLF CLUB, LLC	)	1 00-CV-1871-JEC
	)	
<u>Defendants.</u>	)	Hon. Julie E. Carnes
	)	
CALLAWAY GOLF COMPANY and	)	
CALLAWAY GOLF BALL COMPANY	)	
	)	
<u>Counterclaimants,</u>	)	
	)	
v.	)	
	)	
BRIDGESTONE SPORTS CO., LTD.	)	
	)	
<u>Counterdefendant.</u>	)	

MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF  
CALLAWAY GOLF COMPANY AND CALLAWAY GOLF BALL COMPANY'S  
MOTION FOR PARTIAL SUMMARY JUDGMENT

TABLE OF CONTENTPage No.

I.	INTRODUCTION.....	1
II.	THE HIGUCHI PATENT CLAIMS ARE INVALID.....	2
A.	Summary Judgment is Appropriate Where the Patent Claims are Invalid by Clear and Convincing Evidence.....	2
B.	Patent Claims Are Invalid When Expressly Or Inherently Anticipated By A Single Prior Art Reference.....	2
C.	Each And Every Element Of Claims 1, 2, 6, and 8 Of The Higuchi Patent Is Anticipated By The Nesbitt Patent.....	5
1.	The Higuchi Patent Claims Require A 3- Piece Golf Ball Having Certain Physical Properties.....	5
2.	The Nesbitt Patent Also Describes A 3- Piece golf Ball Having The Same Physical Properties.....	6
3.	The Nesbitt Patent Discloses Every Element of Claim 1 Of The Higuchi Patent.....	8
a.	The Nesbitt Patent Discloses A 3- Piece Golf Ball.....	9
b.	The Nesbitt Patent Discloses The Core Of Claim 1 Of The Higuchi Patent.....	9
c.	The Nesbitt Patent Discloses The Intermediate Layer Required By Claim 1.....	10
d.	The Nesbitt Patent Discloses The Outer Layer Required By Claim 1.....	11
4.	The Nesbitt Patent Discloses Every Element of Dependent Claim 2.....	13
5.	The Nesbitt Patent Discloses Every Element Required Of Dependent Claim 4.....	13
6.	The Nesbitt Patent Discloses Every Element of Dependent Claim 6.....	16

TABLE OF CONTENT  
(Cont'd)

Page No.

7. The Nesbitt Patent Discloses Every Element of Dependent Claim 8.....	16
III. CONCLUSION.....	17

TABLE OF AUTHORITIESPage No.

<u>Anderson v. Liberty Lobby, Inc.,</u> 477 U.S. 242 (1986).....	3
<u>Atlas Powder Co. v. IRECO, Inc.,</u> 190 F.3d 1342 (Fed. Cir. 1999).....	10
<u>In re Baxter Travenol Labs.,</u> 952 F.2d 388 (Fed. Cir. 1991).....	16
<u>Continental Can Co. USA, Inc., v. Monsanto Co.,</u> 948 F.2d 1264 (Fed. Cir. 1991).....	3, 5
<u>Fenton Golf Trust v. Cobra Golf, Inc.,</u> 1998 WL 292997 (N.D. Ill.) .....	15
<u>Finnigan Corp. v. Int'l Trade Comm'n,</u> 180 F.3d 1354 (Fed. Cir. 1999).....	5
<u>In re Graves,</u> 69 F.3d 1147 (Fed. Cir. 1995).....	5, 15
<u>Jamesbury Corp. V. Litton Indus. Products, Inc.,</u> 839 F.2d 1544 (Fed. Cir. 1988).....	4
<u>In re LeGrice,</u> 301 F.2d 929 (C.C.P.A. 1962).....	5
<u>MEHL/Biophile Int'l Corp. v. Milgraum,</u> 192 F.3d 1362 (Fed. Cir. 1999).....	3, 5, 6, 9
<u>SSIH Equipment S.A. v. United States Int'l Trade</u> <u>Comm'n.,</u> 718 F.2d 365 (Fed. Cir. 1983).....	5
<u>In re Schreiber,</u> 128 F.3d 1473 (Fed. Cir. 1997).....	5

OTHER AUTHORITIES

Fed. R. Civ. P. 56.....	3
35 U.S.C. § 101.....	4



TABLE OF AUTHORITIES  
(Cont'd)

	<u>Page No.</u>
35 U.S.C. § 102.....	2, 4, 5, 8
35 U.S.C. § 103.....	4

# I. INTRODUCTION

Plaintiff Bridgestone Sports Company, Ltd. ("Bridgestone") has accused Callaway Golf Company and Callaway Golf Ball Company (collectively "Callaway Golf") of infringing four U.S. patents covering golf balls. By this Motion, Callaway Golf seeks an order invalidating one of those patents, U.S. Patent No. 5,553,852 to Higuchi et al. (the "Higuchi patent") as a matter of law. This Motion is supported by the Declarations of Bernard C. Soriano and Benjamin A. Katzenellenbogen.

A later patent is invalid if the claimed invention is described in an earlier patent that issued more than one year before the later patent was filed. The later patent is said to be "anticipated" by the earlier patent. Here, the invention claimed in Bridgestone's Higuchi patent is anticipated by an earlier U.S. patent, U.S. Patent No. 4,431,193 to Nesbitt (the "Nesbitt patent"). In other words, every feature claimed in the later Higuchi patent is found in the earlier Nesbitt patent. Under 35 U.S.C. Section 102, those Higuchi claims are invalid. For the convenience of the Court, Callaway Golf has attached, as Appendix A, a claim chart directly comparing the Higuchi patent claims at issue with the Nesbitt patent disclosures.

Because there is no genuine issue of material fact as to the limitations of the Higuchi claims, nor what the Nesbitt patent discloses, it is appropriate for this Court to find the Higuchi patent invalid as a matter of law.

## II. THE HIGUCHI PATENT CLAIMS ARE INVALID

### A. Summary Judgment is Appropriate Where the Patent Claims are Invalid by Clear and Convincing Evidence

Summary judgment is appropriate in patent cases, as in any other case, when there is no genuine issue of material fact, and the movant is entitled to judgment as a matter of law. Continental Can Co. USA, Inc., v. Monsanto Co., 948 F.2d 1264, 1265 (Fed. Cir. 1991), citing Fed. R. Civ. P. 56(c). Where the undisputed facts show that patent claims are invalid by clear and convincing evidence, it is appropriate to grant summary judgment that the claims are invalid as a matter of law. See MEHL/Biophile Int'l Corp. v. Milgraum, 192 F.3d 1362, 1366-67 (Fed. Cir. 1999) (affirming summary judgement of invalidity based on a single anticipating reference).

### B. Patent Claims Are Invalid When Expressly Or Inherently Anticipated By A Single Prior Art Reference

A patent describes the invention in what is referred to as the patent specification. At the end of the patent specification there are one or more enumerated paragraphs called "claims." The claims define the limits of the

invention, i.e., the scope of patent protection, by describing certain features or limitations. Valid claims are limited to new subject matter disclosed in the patent specification. See 35 U.S.C. § 102. In other words, a patent may not claim subject matter that was already known to those of ordinary skill in the art. Patent claims encompassing subject matter already known to those of ordinary skill in the art are invalid.

Descriptions or examples of what was already known to those of ordinary skill in the art are referred to as "prior art" references. The issue of patent validity is determined by comparing each claim of the patent to the prior art. A patent claim is anticipated, and therefore invalid, if every element recited in the claim may be found in a single prior art reference. See 35 U.S.C. § 102(a); Continental Can, 948 F.2d at 1267.<sup>1</sup> "To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently."<sup>2</sup> In re

<sup>1</sup> The burden is on the party asserting invalidity to prove it with facts supported by clear and convincing evidence. SSIH Equipment S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365, 375 (Fed. Cir. 1983).

<sup>2</sup> An inherent disclosure is one that may be determined based upon what is expressly disclosed. For example, one may use simple mathematics to calculate the volume of the spherical core of a golf ball core from a disclosure of the diameter of the golf ball core. Thus, the volume of a spherical golf ball core is inherently

Schreiber, 128 F.3d 1473, 1477 (Fed. Cir. 1997) (emphasis added); see also MEHL/Biophile, 192 F.3d at 1365. A reference anticipates a claim if it discloses the claimed invention "such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention." In re Graves, 69 F.3d 1147, 1152 (Fed. Cir. 1995), citing In re LeGrice, 301 F.2d 929, (C.C.P.A. 1962).

Whether a prior art reference anticipates a patent claim, and whether a claim limitation is inherently disclosed in a prior art reference, are questions of fact. Finnigan Corp. v. Int'l Trade Comm'n, 180 F.3d 1354, 1362 (Fed. Cir. 1999). Where there is no reasonable dispute that a written prior art reference explicitly or inherently discloses every element recited in the claim, summary judgment of anticipation should be granted because "[n]o reasonable jury could find otherwise." MEHL/Biophile, 192 F.3d at 1366 (holding expert testimony that contradicts the plain teachings of a written prior art reference does not create a genuine issue of fact).

---

disclosed by a patent that discloses the diameter of the golf ball core.

C. Each And Every Element Of Claims 1, 2, 6, and 8 Of The Higuchi Patent Is Anticipated By The Nesbitt Patent

1. The Higuchi Patent Claims Require A 3-Piece Golf Ball Having Certain Physical Properties

Bridgestone contends that Callaway Golf infringes Claims 1, 2, 4, 6, and 8 of the Higuchi patent. Ex. 1 to Soriano Decl. Each of those claims requires a three-piece golf ball consisting of a solid center core (1), an intermediate layer covering the core (2), and an outer cover (3). Figure 1 below, taken from Figure 1 of the Higuchi patent, shows the Higuchi ball.

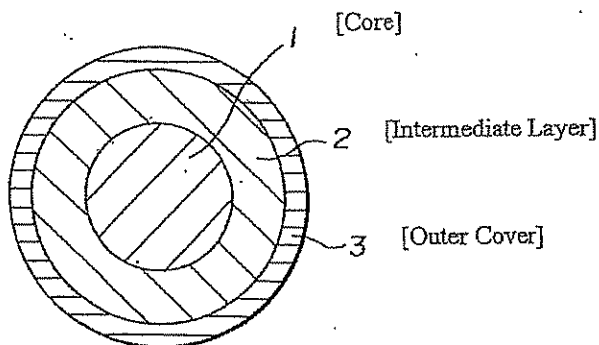


Figure 1

The claims of the Higuchi patent set forth certain physical properties of each of the three pieces of the Higuchi golf ball. For example, the Higuchi patent claims require that the solid center core of the golf ball and the intermediate layer of the golf ball have a certain range of

diameters and a certain range of specific gravities.<sup>3</sup> Each of these physical properties has a clearly defined meaning that can be scientifically and objectively determined.

In order to ascertain whether a description of a prior art golf ball anticipates the patent claims, one need only objectively measure the properties of the described prior art golf ball. If the prior art golf ball has each of the claimed properties, it anticipates the claims. Here, the golf ball described in the Nesbitt patent has each of the properties claimed in the Higuchi patent and therefore anticipates the claims of the Higuchi patent.

2. The Nesbitt Patent Also Describes A 3-Piece golf Ball Having The Same Physical Properties

The Nesbitt patent, Ex. 2 to Soriano Decl., issued on February 14, 1984, over ten years before the Higuchi patent was filed. It is, therefore, indisputably prior art to the Higuchi patent. 35 U.S.C. § 102(b). As discussed in more detail below, the Nesbitt patent describes a three-piece golf ball that has all of the properties required by the Higuchi patent claims. Figure 2 below, taken from Figure 2 of the Nesbitt patent, shows the Nesbitt ball. Like the Higuchi patent, the Nesbitt patent discloses a golf ball

<sup>3</sup> The specific gravity of a material is the ratio of the density of the material to the density of water. Soriano Decl. at ¶ 16.

consisting of a solid center core (12), an intermediate layer covering the core (14), and an outer cover (16).

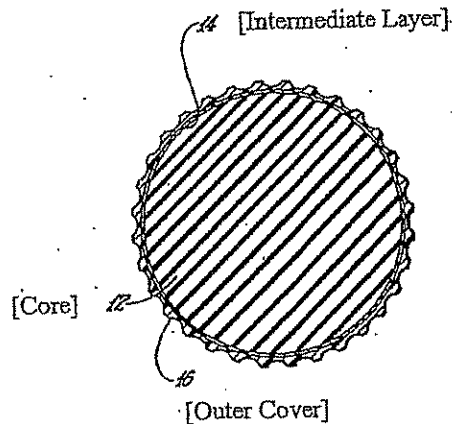


Figure 2

While the Nesbitt patent expressly discloses many of the physical properties claimed in the Higuchi patent, it does not expressly disclose them all. It does, however, inherently disclose those non-expressed features. In other words, the Nesbitt patent discloses enough about its golf ball to allow one to ascertain those remaining properties.<sup>4</sup> In evaluating the issue of anticipation, inherent disclosure has the same legal significance as express

<sup>4</sup> As an example, the Nesbitt patent does not expressly disclose the diameter of the center core of its golf ball. It does, however, expressly disclose the outer diameter of the golf ball, the thickness of the outer cover and the thickness of the intermediate layer. By mere subtraction, one may calculate the diameter of the center



disclosure. MEHL/Biophile, 192 F.3d at 1365 ("a prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference are nonetheless inherent in it.").

3. The Nesbitt Patent Discloses Every Element of Claim 1 Of The Higuchi Patent

There are eight claims in the Higuchi patent. Claim 1 is the only independent claim. Each of Claims 2 through 8 depend from Claim 1 and, thus, include all of the features required by Claim 1. Claim 1 is as follows:

1. A three-piece solid golf ball comprising;
  - a center core, an intermediate layer, and a cover enclosing the core through the intermediate layer,
  - said center core having a diameter of at least 29 mm and a specific gravity of less than 1.4,
  - said intermediate layer having a thickness of at least 1 mm, a specific gravity of less than 1.2, and a hardness of at least 85 on JIS C scale, the specific gravity of said intermediate layer being lower than the specific gravity of said center core, and
  - said cover having a thickness of 1 to 3 mm and being softer than said intermediate layer.

Higuchi patent at col. 6:65-7:09.

---

core. The diameter of the center core is, therefore, inherently disclosed in the Nesbitt patent.

a. The Nesbitt Patent Discloses A 3-Piece Golf Ball

Claim 1 of the Higuchi patent requires a center core, an intermediate layer, and a cover. Those three features are expressly disclosed in the Nesbitt patent, which describes a golf ball having a "spherical ... core 12," an "inner layer 14," and a "cover 16." Nesbitt patent at col. 2:34-43. See Figure 2, above; see also Appendix A (claim chart).

b. The Nesbitt Patent Discloses The Core Of Claim 1 Of The Higuchi Patent

Claim 1 of the Higuchi patent requires that the core have a diameter of at least 29 mm and a specific gravity of less than 1.4. Where a patent recites a range of values for a particular claimed element, rather than a specific value, a prior art reference anticipates that range if it discloses any value within that claimed range, or if it discloses an overlapping range. See Atlas Powder Co. v. IRECO, Inc., 190 F.3d 1342, 1346 (Fed. Cir. 1999).

The Nesbitt patent inherently discloses a core that has a diameter in the range of 34 mm to 41 mm. Soriano Decl. at ¶ 9. Because the Nesbitt range contains values "of at least 29 mm," it anticipates the range claimed in the Higuchi patent.

The Nesbitt patent also inherently discloses a golf ball core that has a specific gravity in the range of 1.2 to 1.3. Soriano Decl. at ¶¶ 10-17. This disclosed range anticipates the claimed range of "less than 1.4."

c. The Nesbitt Patent Discloses The Intermediate Layer Required By Claim 1

Claim 1 requires that the intermediate layer have a thickness of at least 1 mm. The Nesbitt patent inherently discloses a golf ball having an intermediate layer, thickness ranging from 0.51 mm to 1.8 mm. Soriano Decl. at ¶ 19. Because that range includes thicknesses "of at least 1 mm," it anticipates the claimed range.

Claim 1 further requires that the intermediate layer have a specific gravity of less than 1.2. The Nesbitt patent expressly discloses an intermediate layer made of Surlyn 1605, which has a known specific gravity of 0.95. (See Ex. 5 to Soriano Decl. at DUP0000039.) Thus, the Nesbitt patent inherently discloses an intermediate layer having a specific gravity of 0.95. This value is "less than 1.2," as required by Claim 1.

Claim 1 further requires that the specific gravity of the intermediate layer be lower than the specific gravity of the core. The specific gravity of the intermediate layer disclosed in the Nesbitt patent (0.95) is less than

the specific gravity of the core disclosed in the Nesbitt patent (ranging from 1.2 to 1.3). It, therefore, anticipates the claimed range.

Claim 1 further requires that the intermediate layer have a hardness of at least 85 on the JIS-C<sub>4</sub> (Japanese Industrial Standard) scale. The Nesbitt patent inherently discloses an intermediate layer having a Shore-D hardness of 67. Soriano Decl. at ¶ 20. Using the chart provided by Bridgestone in its Complaint, which compares Shore D hardness values with JIS-C hardness values, the Nesbitt patent inherently discloses an intermediate layer having a JIS-C hardness of 95, which is at least 85, and which anticipates the claimed range. Soriano Decl. at ¶¶ 20-21.

d. The Nesbitt Patent Discloses The Outer Layer Required By Claim 1

Claim 1 requires that the outer cover have a thickness of 1 to 3 mm. The Nesbitt patent inherently discloses a golf ball having an outer cover thickness ranging from 0.51 mm to 2.54 mm. Soriano Decl. at ¶ 19. The portion of disclosed range from 1 mm to 2.54 mm overlaps the range claimed by the Higuchi patent, and therefore anticipates the claimed range.

Claim 1 further requires that the outer cover be softer than the intermediate layer. The Nesbitt patent

expressly discloses that the outer cover may be "comparatively soft" with respect to the intermediate layer. Nesbitt patent at cols. 2:42-44, 3:65-68. The Nesbitt patent also inherently discloses an outer cover that is softer than the intermediate layer based on the hardness of the materials used to make the layers. See Ex. 5 to Soriano Decl. at DUP0000039.

In view of the above, it is without dispute that the Nesbitt patent anticipates each element of Claim 1. Soriano Decl. at ¶ 25. Indeed, Bridgestone conceded as much when the Nesbitt patent was asserted as anticipating prior art in an opposition to European Patent No. 0 633 048 B1, (Ex. 1 to Katzenellenbogen Decl.) the European equivalent of the Higuchi patent. The challenged claim language contained the same limitations recited above for Claim 1. Id. at pp. 6:56-7:5. When Nesbitt was cited as invalidating prior art, Bridgestone did not contest the validity issue, but instead amended its claim to incorporate limitations relating to a range of core hardnesses. Ex. 2 to Katzenellenbogen Decl., p. 6 (BSP001053). Those core hardness limitations are not at issue before this court. In passing upon the validity challenge, the European Patent Office found that the Nesbitt patent disclosed all of the limitations of Higuchi,

except for the newly added core hardness limitation: Id.  
p. 9 (BSP001056).

4. The Nesbitt Patent Discloses Every Element of  
Dependent Claim 2

Claim 2 of the Higuchi patent depends from Claim 1 and further requires that the intermediate layer be formed of a high repulsion ionomer resin base composition. Higuchi patent at col. 7:10-12. In discussing repulsive ionomer resins, the Higuchi patent discloses using a material called Hi-Milan 1605 for the intermediate layer. Id. at col. 3:49-53. Hi-Milan 1605 is chemically "very similar" to Surlyn 1605: See Ex. 4 to Soriano Decl. (Weddell Dep. at 10:5-9). Because the Nesbitt patent discloses using Surlyn 1605, it inherently discloses using a repulsive ionomer resin. See Nesbitt patent at col. 3:20-21. Thus, the Nesbitt patent anticipates dependent Claim 2.

5. The Nesbitt Patent Discloses Every Element  
Required Of Dependent Claim 4

Claim 4 of the Higuchi patent depends from Claim 1 and further requires that the center core include polybutadiene rubber. Higuchi patent at col. 8:01-02. The Nesbitt patent expressly discloses that the golf ball core be formed of "resilient polymeric material or rubber-like material in the shape of a sphere." Nesbitt patent at col. 2:30-34. A widely used core material for golf balls by the

early 1990s was polybutadiene rubber.<sup>5</sup> Soriano Decl. at ¶ 23. Indeed, U.S. Patent No. 4,274,637, issued to Molitor in 1981, and to which the Nesbitt patent expressly cites, discloses a polybutadiene core, as required by Claim 4 of the Higuchi patent. Ex. 3 to Soriano Decl. at col. 3:59-64. Indeed, the Molitor patent confirms that polybutadiene cores were "generally known in the prior art." Id.

Because the use of polybutadiene rubber in golf ball cores was so well known, a person of ordinary skill in the

---

<sup>5</sup> Various prior art patents assigned to Bridgestone Corp. describe polybutadiene cores as well-known in the art. See Ex. 8 to Soriano Decl. - U.S. Patent No. 5,019,319 to Nakamura, et al. at col. 1:10-23 ("In the prior art, these . . . cores of multi-layered golf balls were prepared by molding a rubber composition comprising a rubber component (base rubber) such as polybutadiene . . ."); Ex. 6 to Soriano Decl. - U.S. Patent No. 4,858,924 to Saito, et al. at col. 1:14-21 ("[w]ell known in the art are . . . golf balls that are generally formed by milling polybutadiene rubber [with other materials] to form a rubber composition . . . into a solid core"); Ex. 7 to Soriano Decl. - U.S. Patent No. 4,919,434 to Saito at col. 1:20-23 ("[t]here has been known a . . . solid golf ball formed by covering a solid core . . . said core being produce by mixing polybutadiene rubber [with other materials] and molding the mixture with heating."). Moreover, numerous other prior art patents specifically disclose the use of polybutadiene cores in three-piece solid golf balls. See Exs. 9-16 to Soriano Decl. - U.S. Patent No. 4,714,253 to Nakahara, et al. at Table 1; U.S. Patent No. 4,781,383, to Kamada, et al. at col. 2:26-59; U.S. Patent No. 4,848,770 to Shama at cols. 1:57-2:7; U.S. Patent No. 4,863,167 to Matsuki, et al. at col. 2:17-20; U.S. Patent No. 5,002,281 to Nakahara, et al. at col. 2:25-39; U.S. Patent No. 5,048,838 to Chikaraishi, et al. at col. 2:46-59; U.S. Patent No. 5,072,944 to Nakahara, et al.

art would have understood the Nesbitt reference to "a resilient polymeric or rubber-like material" as teaching the use of polybutadiene rubber for the core material.<sup>6</sup> Soriano Decl. at ¶ 23. Thus, the Nesbitt patent anticipates dependent Claim 4. See In re Graves, 69 F.3d at 1152 (a reference anticipates a claim if it discloses the claimed invention "such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention."); Fenton Golf Trust v. Cobra Golf, Inc., 1998 WL 292997 (N.D. Ill.) (invalidating patent on summary judgment based upon anticipating reference viewed in connection with the knowledge of a person of ordinary skill in the art reading such reference).

Moreover, the Federal Circuit has specifically held that where every limitation of a patent claim, except for the chemical composition of one feature, is disclosed in a prior art reference, and one of ordinary skill in the art would have known the chemical composition of that feature,

---

at col. 2:14-30; U.S. Patent No. 5,184,828 to Kim, et al. at col. 3:65-68.

<sup>6</sup> Indeed, the Higuchi patent concedes that polybutadiene rubber was a well-known core material at the time it was filed in 1994. Higuchi patent at col. 3:06-07 ("[t]he center core 1 is generally formed from a well-known rubber composition . . . preferably . . . polybutadiene rubber.") (emphasis added).



the patent claim is invalid as anticipated.<sup>7</sup> In re Baxter Travenol Labs., 952 F.2d 388, 390-91 (Fed. Cir. 1991).

6. The Nesbitt Patent Discloses Every Element of Dependent Claim 6

Claim 6 of the Higuchi patent depends from Claim 1 and further requires that the difference in the specific gravity between the center core and the intermediate layer be in the range of 0.1 to 0.5. Higuchi patent at col. 8:05-07. The difference disclosed in the Nesbitt patent is, in the range of 0.25 and 0.35. Soriano Decl. at ¶ 18. This disclosed range is entirely within the range claimed by the Higuchi patent and, therefore, anticipates Dependent Claim 6.

7. The Nesbitt Patent Discloses Every Element of Dependent Claim 8

Claim 8 of the Higuchi patent depends from Claim 1 and further requires that the JIS-C hardness of the intermediate layer be in the range of 85-100. Higuchi patent at col. 8:10-11. The Nesbitt patent inherently discloses an intermediate layer having a Shore-D hardness of 67. Soriano Decl. at ¶ 20; Ex. 5 to Soriano Decl. at DUP0000039. Based on the chart in the Bridgestone

---

<sup>7</sup> Dependent Claim 4 is also obvious over the Nesbitt patent because a person of ordinary skill in this field, Soriano Decl. at ¶ 22, would have thought it obvious to

Complaint, this value corresponds to a JIS-C hardness of 95.<sup>4</sup> Id. at ¶ 21. This value is within the range claimed by the Higuchi patent and, therefore, anticipates dependent Claim 8.

### III. CONCLUSION

Each and every element required by Claims 1, 2, 4, 6 and 8 of the Higuchi patent is disclosed, either expressly or inherently, in the Nesbitt patent. Given that the facts supporting those conclusions are not in genuine dispute, Callaway Golf is entitled to summary judgment that those claims are invalid as a matter of law.

Respectfully Submitted,

Don W. Martens  
Vito A. Canuso III  
John P. Giezantanner  
Benjamin A. Katzenellenbogen  
KNOBBE MARTENS OLSON & BEAR, LLP  
620 Newport Center Drive  
16<sup>th</sup> Floor  
Newport Beach, CA 92660  
(949) 760-0404

Thomas W. Rhodes  
(Ga. Bar No. 602300)  
SMITH, GAMBRELL & RUSSELL, LLP  
3100 Promenade II  
1230 Peachtree Street  
Atlanta, GA 30309  
(404) 815-3551

By Thomas W. Rhodes  
Attorneys for Defendants/  
Counterclaimants

---

combine the elements of dependent Claim 4. Soriano Decl. at ¶ 24; 35 U.S.C. § 103.

# **EXHIBIT 61**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 62**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 63**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**



# **EXHIBIT 64**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 65**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 66**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 67**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**



# **EXHIBIT 68**

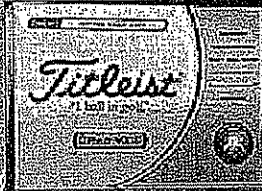
**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

# **EXHIBIT 69**

**THIS EXHIBIT HAS BEEN  
REDACTED IN ITS ENTIRETY**

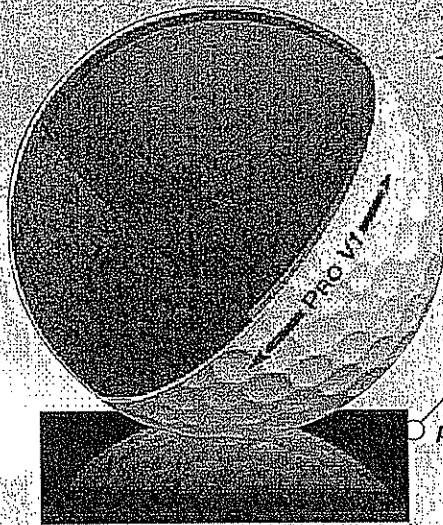
# **EXHIBIT 70**

*Titleist*



The new Pro V1 is a Urethane Elastomer™ covered 3-piece multi-component golf ball featuring enhanced aerodynamics with slightly higher flight for longer distance, soft feel and Drop-And-Stop™ control.

[FOR MORE DETAILED INFORMATION CLICK HERE](#)



- CORE**  
Soft and resilient core formulation for outstanding feel and longer driver distance.
- CASING**
- COVER**
- DIMPLE DESIGN**
- STAGGERED WAVE PARTING LINE**
- A.I.M.**

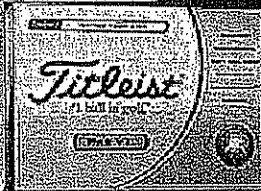
[HOME](#) [THE STORY](#) [PRO V1](#) [PRO V1X](#) [ON TOUR](#)



*Titleist*

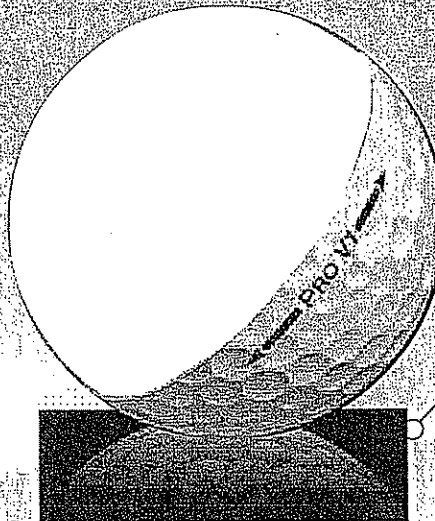
PRO V1

PRO V1X



The new Pro V1 is a Urethane Elastomer™ covered 3-piece multi-component golf ball featuring enhanced aerodynamics with slightly higher flight for longer distance, soft feel and Drop-And-Stop™ control.

[FOR MORE DETAILED INFORMATION CLICK HERE](#)



CORE

CASING

Resilient ionomer casing layer

COVER

DIMPLE DESIGN

STAGGERED WAVE PARTING LINE

A.I.M.

HOME

THE STORY

PRO V1

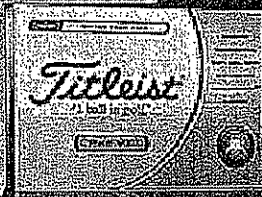
PRO V1X

DR TOUR

CONTACT INFO

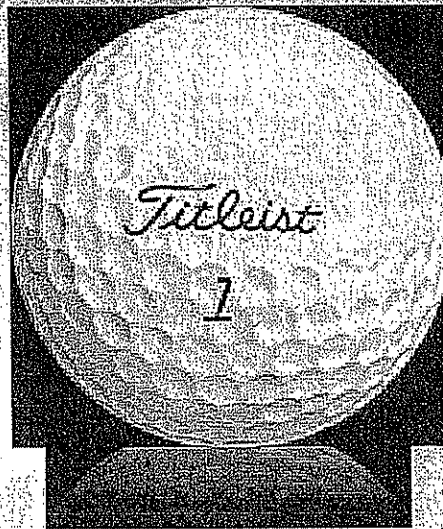


*Titleist*



The new Pro V1 is a Urethane Elastomer™ covered 3-piece multi-component golf ball featuring enhanced aerodynamics with slightly higher flight for longer distance, soft feel and Drop-And-Stop™ control.

[FOR MORE DETAILED INFORMATION CLICK HERE](#)



- CORE
- CASING
- COVER
  - High performance Urethane Elastomer™ cover. The core, casing and cover of the new Pro V1 combine for low spin off the driver and long irons, soft compression for outstanding feel and Drop-And-Stop™ greenside control.
- DIMPLE DESIGN
- STAGGERED WAVE PARTING LINE

I.M.

[HOME](#)

[THE STORY](#)

[PRO V1](#)

[PRO V1X](#)

[ON TOUR](#)



[HELP CENTER](#)



*Titleist*

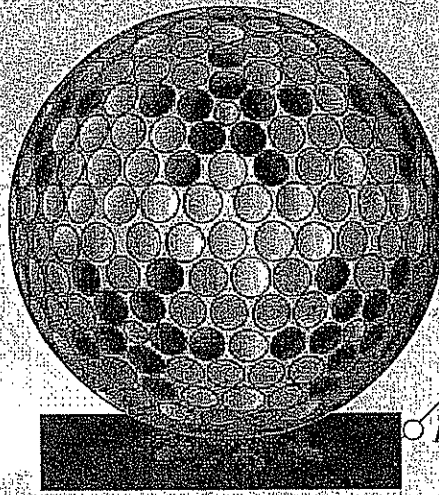
PRO V1

PRO V1X



The new Pro V1 is a Urethane Elastomer™ covered 3-piece multi-component golf ball featuring enhanced aerodynamics with slightly higher flight for longer distance, soft feel and Drop-And-Stop™ control.

[FOR MORE DETAILED INFORMATION CLICK HERE](#)



CORE

CASING

COVER

**DIMPLE DESIGN**

New, higher coverage 392 dimple design contributes to a penetrating trajectory for long, consistent distance.

**STAGGERED WAVE PARTING LINE**

A.I.M.

HOME

THE STORY

PRO V1

PRO V1X

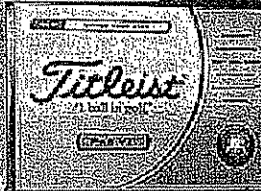
ON TOUR

HELP/CONTACT

*Titleist*

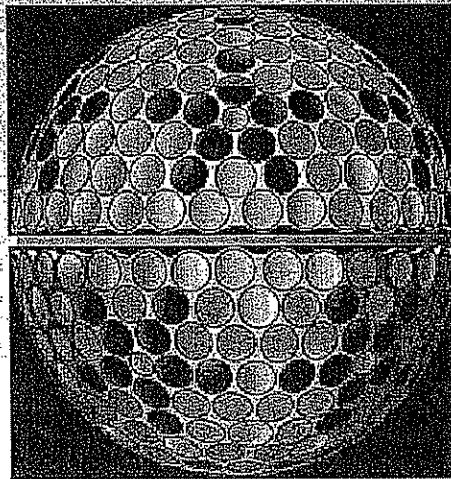
PRO V1

PRO V1X



The new Pro V1 is a Urethane Elastomer™ covered 3-piece multi-component golf ball featuring enhanced aerodynamics with slightly higher flight for longer distance, soft feel and Drop-And-Stop™ control.

FOR MORE DETAILED INFORMATION CLICK HERE



CORE

CASING

COVER

DIMPLE DESIGN

**STAGGERED WAVE PARTING LINE**

New, staggered wave parting line provides longer distance from an enhanced ball flight.

HOME

THE STORY

PRO V1

PRO V1X

ON TOUR

ALL ABOUT TITLEIST

*Titleist*

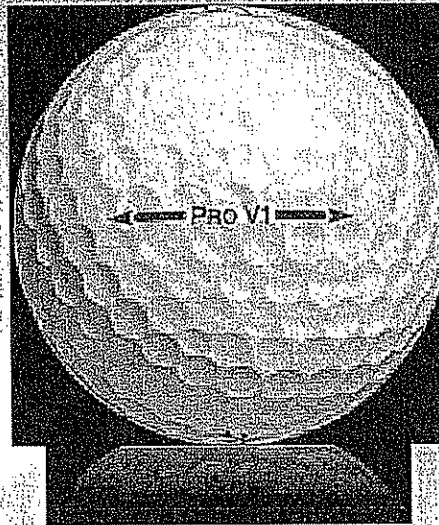
PRO V1

PRO V1X



The new Pro V1 is a Urethane Elastomer™ covered 3-piece multi-component golf ball featuring enhanced aerodynamics with slightly higher flight for longer distance, soft feel and Drop-And-Stop™ control.

FOR MORE DETAILED INFORMATION CLICK HERE



CORE

CASING

COVER

DIMPLE DESIGN

STAGGERED WAVE PARTING LINE

A.I.M.

New, A.I.M. (Alignment Integrated Marking)™ sidestamp is an integrated guide for improved putting alignment.

HOME

THE STORY

PRO V1

PRO V1X

ON TOUR

RELEASE/INTRO